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279



SEQUENCE LISTING

<110> LAMBERTY, MIREILLE
BULET, PHILLIPE
BROOKHART, GARY
HOFFMAN, JULES

<120> GENE CODING FOR HELIOMICINE, AND USE
THEREOF

<130> A33595-PCT-USA

<140> 09/673,274-

<141> 1999-04-12

<150> PCT/FR99/00843

<151> 1999-04-12

<150> FR 98 04933

<151> 1998-04-15

<160> 38

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 147

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gctaacgtta actgttgtg tgaaacc 147

<210> 2

<211> 169

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

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gagtgcaaga ggaggggtta caagggtggt cactgcgggt cttcgctaa cgtgaactgc 120
tggtgcgaga cttgagagct cggcgaggcg aacgtgtcga cggatccgg 169

<210> 3

<211> 261

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

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gtgctgtgaa ctacacttcc gattgcaacg gtgagtgaa gaggagggt tacaagggtg 180
gtcaactgcgg ttccttcgtct aacgtgaact gctggtgca gacttgagag ctcggcgagg 240
cgaacgtgtc gacggatccg g 261

<210> 4

<211> 120

<212> DNA

<213> Artificial Sequence

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ctcttccttctttccttgcgtc tggagacgcg aattcacaca 120

<210> 5

<211> 75

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<400> 5

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ctcttccttctttccttgcgtc tggagacgcg aattcacaca 75

<210> 6

<211> 72

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<400> 6

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aaagatggaa gc 72

<210> 7

<211> 80

<212> DNA

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gagtgcaga ggaggggta 80

<210> 8

<211> 109

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

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<210> 9

<211> 85

<212> DNA

<213> Artificial Sequence

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<210> 10

<211> 66

<212> DNA

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<210> 11

<211> 93

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

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gctcgagggc ccaacctcag tacctggttc agg 93

<210> 12
<211> 93
<212> DNA
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gcgttaaac ttaattaagt gtggcctgac tgg 93

<210> 13
<211> 50
<212> DNA
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<220>
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<400> 13
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<210> 14
<211> 50
<212> DNA
<213> Artificial Sequence

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<210> 15
<211> 81
<212> DNA
<213> Artificial Sequence

<220>
<223> SYNTHETIC POLYNUCLEOTIDE

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atcgtgcacg gcggcaatt c 81

<210> 16
<211> 24
<212> DNA

<213> Artificial Sequence

<220>

<223> SYNTHETIC POLYNUCLEOTIDE

<400> 16

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24

<210> 17

<211> 32

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<400> 17

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32

<210> 18

<211> 213

<212> DNA

<213> Artificial Sequence

<220>

<223> SYNTHETIC POLYNUCLEOTIDE

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 gattgcaacg gtgagtgcaa gaggagggtg tacaagggtg gtcactgcgg ttccttcgct 180
 aacgtgaact gctggcgcga gacttactc gag 213

<210> 19

<211> 838

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<221> promoter

<222> (7) ... (532)

<221> misc_structure

<222> (533) ... (568)

<221> terminator

<222> (569) ... (832)

<400> 19

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ctatgttcaa aaatgaagaa tgtacagata caagatccta tactgccaga atacgaagaa 180
 gaatacgtag aaattgaaaa agaagaacca ggcgaagaaa agaatcttga agacgtaagc 240
 actgacgaca acaatgaaaa gaagaagata aggtcggtga ttgtgaaaga gacatagagg 300
 acacatgtaa ggtggaaaat gtaagggcgg aaagtaacct ttcacaaag gaatcttac 360
 cccactact tatcctttt tattttccg tgtcattttt gcccttgagt tttcttat 420
 aaggaaccaa gttcggcatt tgtgaaaaca agaaaaattt tggtgtaagc tattttctt 480
 gaagtactga ggatacaact tcagagaaat ttgtaagttt gttagatctcg attctagaag 540
 gcctgaattc gagctcggtt ccggatccaa ttcccgtatcg ttcaaacatt tggcaataaa 600
 gtttcttaag attgaatcct gttccggc ttgcgtatcatatat tttctgttga 660
 attacgttaa gcatgtataa attaacatgt aatgcgtac gttatattt agatgggttt 720
 ttatgattag agtcccgcaa ttatacattt aatacgcgt agaaaaacaaa atatacgcg 780
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<210> 20

<211> 1036

<212> DNA

<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<221> promoter

<222> (7) ... (532)

<221> CDS

<222> (539) ... (736)

<221> terminator

<222> (767) ... (1030)

<400> 20

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 ctatgttcaa aaatgaagaa tgtacagata caagatccta tactgccaga atacgaagaa 180
 gaatacgtag aaattgaaaa agaagaacca ggcgaagaaa agaatcttga agacgtaagc 240
 actgacgaca acaatgaaaa gaagaagata aggtcggtga ttgtgaaaga gacatagagg 300
 acacatgtaa ggtggaaaat gtaagggcgg aaagtaacct ttcacaaag gaatcttac 360
 cccactact tatcctttt tattttccg tgtcattttt gcccttgagt tttcttat 420
 aaggaaccaa gttcggcatt tgtgaaaaca agaaaaattt tggtgtaagc tattttctt 480
 gaagtactga ggatacaact tcagagaaat ttgtaagttt gttagatctcg attctaga 538
 atg gcc tgc acc aac aac gcc atg agg gcc ctc ttc ctc ctc gtg ctc 586
 Met Ala Cys Thr Asn Asn Ala Met Arg Ala Leu Phe Leu Leu Val Leu
 1 5 10 15

ttc tgc atc gtg cac ggc gat aag ctt atc ggt tcc tgc gtg tgg ggt	634
Phe Cys Ile Val His Gly Asp Lys Leu Ile Gly Ser Cys Val Trp Gly	
20 25 30	

gct gtg aac tac act tcc gat tgc aac ggt gag tgc aag agg agg ggt	682
Ala Val Asn Tyr Thr Ser Asp Cys Asn Gly Glu Cys Lys Arg Arg Gly	
35 40 45	

tac aag ggt ggt cac tgc ggt tcc ttc gct aac gtg aac tgc tgg tgc	730
Tyr Lys Gly Gly His Cys Gly Ser Phe Ala Asn Val Asn Cys Trp Cys	
50 55 60	

gag act tgactcgagg gggggcccg taccggatcc aattcccgat cgttcaaaca 786
Glu Thr
65

tttggcaata aagtttctta agattgaatc ctgttgccgg tcctgcgatg attatcatat 846
aatttctgtt gaattacgtt aagcatgtaa taattaacat gtaatgcattt acgttattta 906
tgagatgggt ttttagatt agagtcccg aattatacat ttaatacgcg atagaaaaca 966
aatatatagcg cgcaaactag gataaaattat cgcgccggt gtcatctatg ttactagatc 1026
ggggatcgat 1036

<210> 21
<211> 52
<212> DNA
<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<400> 21
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<210> 22
<211> 56
<212> DNA
<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<400> 22
agtgttagttt acggcgcccc aaacacagct gccaatcaac ttgtctttt tatcca 56

<210> 23
<211> 52
<212> DNA
<213> Artificial Sequence

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<400> 23
actacactag tgactgcaac ggcgagtgca agcgccgcgg ttacaagggtt gg 52

<210> 24
<211> 52
<212> DNA
<213> Artificial Sequence

<220>
<223> SYNTHETIC POLYNUCLEOTIDE

<400> 24
cacaatggcc acccttgtaa ccgcggcgct tgcactcgcc gttgcagtca ct 52

<210> 25
<211> 56
<212> DNA
<213> Artificial Sequence

<220>
<223> SYNTHETIC POLYNUCLEOTIDE

<400> 25
ccattgtgga tccttcgcta acgttaactg ttggtgtgaa acctgatagg tcgaca 56

<210> 26
<211> 52
<212> DNA
<213> Artificial Sequence

<220>
<223> SYNTHETIC POLYNUCLEOTIDE

<400> 26
gatctgtcga cctatcaggt ttcacaccaa cagttaacgt tagcgaagga tc 52

<210> 27
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> SYNTHETIC POLYNUCLEOTIDE

<400> 27
gatccttcgc taacgttaac tgggtgtgta gaacctgata gg 42

<210> 28
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> SYNTHETIC POLYNUCLEOTIDE

<400> 28
tcgacctata aggttctaca ccaacagtta acgttagcga ag 42

<210> 29
<211> 32
<212> DNA
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<220>
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<400> 29
ctagtgactg caacggcgag tgcttggc gc 32

<210> 30
<211> 26
<212> DNA
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<220>
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<400> 30
gcaacaagca ctcgccgttg cagtca 26

<210> 31
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<212> DNA
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<400> 31
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<210> 32
<211> 26
<212> DNA
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<400> 32
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<210> 33
<211> 40
<212> DNA
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<220>
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<400> 33
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<210> 34
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> SYNTHETIC POLYNUCLEOTIDE

<400> 34
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<210> 35
<211> 22
<212> DNA
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<220>
<223> SYNTHETIC POLYNUCLEOTIDE

<400> 35
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<210> 36
<211> 36
<212> DNA
<213> Artificial Sequence

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<400> 36
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36

<210> 37
<211> 32
<212> DNA
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<220>
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<400> 37
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<210> 38
<211> 26
<212> DNA
<213> Artificial Sequence

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<223> SYNTHETIC POLYNUCLEOTIDE

<400> 38
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26

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